

Nuclear Regulatory Commission

§ 50.75

(b) Termination of any operator or senior operator;

(c) Permanent disability or illness as described in § 55.25 of this chapter.

[52 FR 9469, Mar. 25, 1987, as amended at 60 FR 13616, Mar. 14, 1995; 68 FR 58809, Oct. 10, 2003]

§ 50.75 Reporting and recordkeeping for decommissioning planning.

(a) This section establishes requirements for indicating to NRC how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. For power reactor licensees, reasonable assurance consists of a series of steps as provided in paragraphs (b), (c), (e), and (f) of this section. Funding for the decommissioning of power reactors may also be subject to the regulation of Federal or State Government agencies (e.g., Federal Energy Regulatory Commission (FERC) and State Public Utility Commissions) that have jurisdiction over rate regulation. The requirements of this section, in particular paragraph (c) of this section, are in addition to, and not substitution for, other requirements, and are not intended to be used, by themselves, by other agencies to establish rates.

(b) Each power reactor applicant for or holder of an operating license for a production or utilization facility of the type and power level specified in paragraph (c) of this section shall submit a decommissioning report, as required by § 50.33(k) of this part.

(1) The report must contain a certification that financial assurance for decommissioning will be (for a license applicant) or has been (for a license holder) provided in an amount which may be more but not less than the amount stated in the table in paragraph (c)(1) of this section.

(2) The amount to be provided must be adjusted annually using a rate at least equal to that stated in paragraph (c)(2) of this section.

(3) The amount must use one or more of the methods described in paragraph (e) of this section as acceptable to the NRC.

(4) The amount stated in the applicant's or licensee's certification may be based on a cost estimate for decommissioning the facility. As part of the

certification, a copy of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section must be submitted to NRC.

(c) Table of minimum amounts (January 1986 dollars) required to demonstrate reasonable assurance of funds for decommissioning by reactor type and power level, P (in MWt); adjustment factor.¹

Millions

(1)(i) For a PWR:	
greater than or equal to	
3400 MWt	\$105
between 1200 MWt and	
3400 MWt (For a PWR of	
less than 1200 MWt, use	
P=1200 MWt)	\$(75+0.0088P)
(ii) For a BWR:	
greater than or equal to	
3400 MWt	\$135
between 1200 MWt and	
3400 MWt (For a BWR of	
less than 1200 MWt, use	
P=1200 MWt)	\$(104+0.009P)

(2) An adjustment factor at least equal to $0.65 L + 0.13 E + 0.22 B$ is to be used where L and E are escalation factors for labor and energy, respectively, and are to be taken from regional data of U.S. Department of Labor Bureau of Labor Statistics and B is an escalation factor for waste burial and is to be taken from NRC report NUREG-1307, "Report on Waste Burial Charges."

(d)(1) Each non-power reactor applicant for or holder of an operating license for a production or utilization facility shall submit a decommissioning report as required by § 50.33(k) of this part.

(2) The report must:

(i) Contain a cost estimate for decommissioning the facility;

(ii) Indicate which method or methods described in paragraph (e) of this section as acceptable to the NRC will be used to provide funds for decommissioning; and

(iii) Provide a description of the means of adjusting the cost estimate

¹Amounts are based on activities related to the definition of "Decommission" in § 50.2 of this part and do not include the cost of removal and disposal of spent fuel or of non-radioactive structures and materials beyond that necessary to terminate the license.

and associated funding level periodically over the life of the facility.

(e)(1) Financial assurance is to be provided by the following methods.

(i) *Prepayment*. Prepayment is the deposit made preceding the start of operation or the transfer of a license under § 50.80 into an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. Prepayment may be in the form of a trust, escrow account, or Government fund with payment by, certificate of deposit, deposit of government or other securities or other method acceptable to the NRC. This trust, escrow account, Government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or Federal government agency, or an entity whose operations in which the prepayment deposit is managed are regulated and examined by a Federal or State agency. A licensee that has prepaid funds based on a site-specific estimate under § 50.75(b)(1) of this section may take credit for projected earnings on the prepaid decommissioning trust funds, using up to a 2 percent annual real rate of return from the time of future funds' collection through the projected decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. A licensee that has prepaid funds based on the formulas in § 50.75(c) of this section may take credit for projected earnings on the prepaid decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate. However, licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take a pro-rata credit during the immediate dismantlement

period (i.e., recognizing both cash expenditures and earnings the first 7 years after shutdown). Actual earnings on existing funds may be used to calculate future fund needs.

(ii) *External sinking fund*. An external sinking fund is a fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates in which the total amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations is expected. An external sinking fund may be in the form of a trust, escrow account, or Government fund, with payment by certificate of deposit, deposit of Government or other securities, or other method acceptable to the NRC. This trust, escrow account, Government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or Federal government agency, or an entity whose operations in which the external sinking fund is managed are regulated and examined by a Federal or State agency. A licensee that has collected funds based on a site-specific estimate under § 50.75(b)(1) of this section may take credit for projected earnings on the external sinking funds using up to a 2 percent annual real rate of return from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. A licensee that has collected funds based on the formulas in § 50.75(c) of this section may take credit for collected earnings on the decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate. However, licensees certifying only to the formula amounts (i.e., not a site-specific estimate) can take a pro-rata credit during the dismantlement period

(i.e., recognizing both cash expenditures and earnings the first 7 years after shutdown). Actual earnings on existing funds may be used to calculate future fund needs. A licensee, whose rates for decommissioning costs cover only a portion of these costs, may make use of this method only for the portion of these costs that are collected in one of the manners described in this paragraph, (e)(1)(ii). This method may be used as the exclusive mechanism relied upon for providing financial assurance for decommissioning in the following circumstances:

(A) By a licensee that recovers, either directly or indirectly, the estimated total cost of decommissioning through rates established by “cost of service” or similar ratemaking regulation. Public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, that establish their own rates and are able to recover their cost of service allocable to decommissioning, are assumed to meet this condition.

(B) By a licensee whose source of revenues for its external sinking fund is a “non-bypassable charge,” the total amount of which will provide funds estimated to be needed for decommissioning pursuant to §§ 50.75(c), 50.75(f), or 50.82 of this part.

(iii) A surety method, insurance, or other guarantee method:

(A) These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond, letter of credit, or line of credit. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(I) The surety method or insurance must be open-ended, or, if written for a specified term, such as 5 years, must be renewed automatically, unless 90 days or more prior to the renewal day the issuer notifies the NRC, the beneficiary, and the licensee of its intention not to renew. The surety or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the NRC within 30 days

after receipt of notification of cancellation.

(2) The surety or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the NRC. An acceptable trustee includes an appropriate State or Federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(B) A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in appendix A to 10 CFR part 30.

(C) For commercial companies that issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in appendix C to 10 CFR part 30. For commercial companies that do not issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs may be used if the guarantee and test are as contained in appendix D to 10 CFR part 30. For non-profit entities, such as colleges, universities, and non-profit hospitals, a guarantee of funds by the applicant or licensee may be used if the guarantee and test are as contained in appendix E to 10 CFR part 30. A guarantee by the applicant or licensee may not be used in any situation in which the applicant or licensee has a parent company holding majority control of voting stock of the company.

(iv) For a power reactor licensee that is a Federal licensee, or for a non-power reactor licensee that is a Federal, State, or local government licensee, a statement of intent containing a cost estimate for decommissioning, and indicating that funds for decommissioning will be obtained when necessary.

(v) Contractual obligation(s) on the part of a licensee's customer(s), the total amount of which over the duration of the contract(s) will provide the licensee's total share of uncollected funds estimated to be needed for decommissioning pursuant to §§ 50.75(c), 50.75(f), or 50.82. To be acceptable to the NRC as a method of decommissioning funding assurance, the terms of

the contract(s) shall include provisions that the electricity buyer(s) will pay for the decommissioning obligations specified in the contract(s), notwithstanding the operational status either of the licensed power reactor to which the contract(s) pertains or force majeure provisions. All proceeds from the contract(s) for decommissioning funding will be deposited to the external sinking fund. The NRC reserves the right to evaluate the terms of any contract(s) and the financial qualifications of the contracting entity(ies) offered as assurance for decommissioning funding.

(vi) Any other mechanism, or combination of mechanisms, that provides, as determined by the NRC upon its evaluation of the specific circumstances of each licensee submittal, assurance of decommissioning funding equivalent to that provided by the mechanisms specified in paragraphs (e)(1)(i) through (v) of this section. Licensees who do not have sources of funding described in paragraph (e)(1)(ii) of this section may use an external sinking fund in combination with a guarantee mechanism, as specified in paragraph (e)(1)(iii) of this section, provided that the total amount of funds estimated to be necessary for decommissioning is assured.

(2) The NRC reserves the right to take the following steps in order to ensure a licensee's adequate accumulation of decommissioning funds: review, as needed, the rate of accumulation of decommissioning funds; and, either independently or in cooperation with the FERC and the licensee's State PUC, take additional actions as appropriate on a case-by-case basis, including modification of a licensee's schedule for the accumulation of decommissioning funds.

(f)(1) Each power reactor licensee shall report, on a calendar-year basis, to the NRC by March 31, 1999, and at least once every 2 years thereafter on the status of its decommissioning funding for each reactor or part of a reactor that it owns. The information in this report must include, at a minimum: the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c); the amount accumulated to the end of the calendar year

preceding the date of the report; a schedule of the annual amounts remaining to be collected; the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections; any contracts upon which the licensee is relying pursuant to paragraph (e)(1)(v) of this section; any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements. Any licensee for a plant that is within 5 years of the projected end of its operation, or where conditions have changed such that it will close within 5 years (before the end of its licensed life), or has already closed (before the end of its licensed life), or for plants involved in mergers or acquisitions shall submit this report annually.

(2) Each power reactor licensee shall at or about 5 years prior to the projected end of operations submit a preliminary decommissioning cost estimate which includes an up-to-date assessment of the major factors that could affect the cost to decommission.

(3) Each non-power reactor licensee shall at or about 2 years prior to the projected end of operations submit a preliminary decommissioning plan containing a cost estimate for decommissioning and an up-to-date assessment of the major factors that could affect planning for decommissioning. Factors to be considered in submitting this preliminary plan information include—

(i) The decommissioning alternative anticipated to be used. The requirements of § 50.82(b)(4)(i) must be considered at this time;

(ii) Major technical actions necessary to carry out decommissioning safely;

(iii) The current situation with regard to disposal of high-level and low-level radioactive waste;

(iv) Residual radioactivity criteria;

(v) Other site specific factors which could affect decommissioning planning and cost.

(4) If necessary, the cost estimate, for power and non-power reactors, shall also include plans for adjusting levels of funds assured for decommissioning to demonstrate that a reasonable level

Nuclear Regulatory Commission

§ 50.75

of assurance will be provided that funds will be available when needed to cover the cost of decommissioning.

(g) Each licensee shall keep records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the Commission. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the Commission considers important to decommissioning consists of—

(1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when significant contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(3) Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

(4) Records of:

(i) The licensed site area, as originally licensed, which must include a site map and any acquisition or use of property outside the originally licensed site area for the purpose of receiving, possessing, or using licensed materials;

(ii) The licensed activities carried out on the acquired or used property; and

(iii) The release and final disposition of any property recorded in paragraph (g)(4)(i) of this section, the historical site assessment performed for the release, radiation surveys performed to support release of the property, submittals to the NRC made in accordance with § 50.83, and the methods employed to ensure that the property met the radiological criteria of 10 CFR Part 20, Subpart E, at the time the property was released.

(h)(1) Licensees that are not “electric utilities” as defined in § 50.2 that use prepayment or an external sinking fund to provide financial assurance shall provide in the terms of the arrangements governing the trust, escrow account, or Government fund, used to segregate and manage the funds that—

(i) The trustee, manager, investment advisor, or other person directing investment of the funds:

(A) Is prohibited from investing the funds in securities or other obligations of the licensee or any other owner or operator of any nuclear power reactor or their affiliates, subsidiaries, successors or assigns, or in a mutual fund in which at least 50 percent of the fund is invested in the securities of a licensee or parent company whose subsidiary is an owner or operator of a foreign or domestic nuclear power plant. However, the funds may be invested in securities tied to market indices or other non-nuclear sector collective, commingled, or mutual funds, provided that this subsection shall not operate in such a way as to require the sale or transfer either in whole or in part, or other disposition of any such prohibited investment that was made before the publication date of this rule, and provided further that no more than 10 percent of trust assets may be indirectly invested in securities of any entity owning or operating one or more nuclear power plants.

(B) Is obligated at all times to adhere to a standard of care set forth in the trust, which either shall be the standard of care, whether in investing or otherwise, required by State or Federal law or one or more State or Federal regulatory agencies with jurisdiction

over the trust funds, or, in the absence of any such standard of care, whether in investing or otherwise, that a prudent investor would use in the same circumstances. The term “prudent investor,” shall have the same meaning as set forth in the Federal Energy Regulatory Commission’s “Regulations Governing Nuclear Plant Decommissioning Trust Funds” at 18 CFR 35.32(a)(3), or any successor regulation.

(ii) The licensee, its affiliates, and its subsidiaries are prohibited from being engaged as investment manager for the funds or from giving day-to-day management direction of the funds’ investments or direction on individual investments by the funds, except in the case of passive fund management of trust funds where management is limited to investments tracking market indices.

(iii) The trust, escrow account, Government fund, or other account used to segregate and manage the funds may not be amended in any material respect without written notification to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the proposed effective date of the amendment. The licensee shall provide the text of the proposed amendment and a statement of the reason for the proposed amendment. The trust, escrow account, Government fund, or other account may not be amended if the person responsible for managing the trust, escrow account, Government fund, or other account receives written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period; and

(iv) Except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, no disbursement or payment may be made from the trust, escrow account, Government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disburse-

ment or payment has been given to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, Government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, escrow account, Government fund, or other account does not receive written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, Government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

(2) Licensees that are “electric utilities” under § 50.2 that use prepayment or an external sinking fund to provide financial assurance shall include a provision in the terms of the trust, escrow account, Government fund, or other account used to segregate and manage funds that except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, no disbursement or payment may be made from the trust, escrow account, Government fund, or other account used to segregate and manage the funds until written notice of the intention to make

Nuclear Regulatory Commission

§ 50.78

a disbursement or payment has been given the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, Government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, escrow account, Government fund, or other account does not receive written notice of objection from the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, Government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

(3) A licensee that is not an “electric utility” under §50.2 and using a surety method, insurance, or other guarantee method to provide financial assurance shall provide that the trust established for decommissioning costs to which the surety or insurance is payable contains in its terms the requirements in paragraphs (h)(1)(i), (ii), (iii), and (iv) of this section.

(4) Unless otherwise determined by the Commission with regard to a specific application, the Commission has determined that any amendment to the license of a utilization facility that does no more than delete specific license conditions relating to the terms and conditions of decommissioning trust agreements involves “no significant hazards consideration.”

(5) The provisions of paragraphs (h)(1) through (h)(3) of this section do not apply to any licensee that as of December 24, 2003, has existing license conditions relating to decommissioning trust agreements, so long as the licensee does not elect to amend those license conditions. If a licensee with existing license conditions relating to decommissioning trust agreements elects to amend those conditions, the license amendment shall be in accordance with the provisions of paragraph (h) of this section.

[53 FR 24049, June 27, 1988, as amended at 58 FR 68731, Dec. 29, 1993; 59 FR 1618, Jan. 12, 1994; 61 FR 39301, July 29, 1996; 63 FR 50480, Sept. 22, 1998; 63 FR 57236, Oct. 27, 1998; 68 FR 19727, Apr. 22, 2003; 67 FR 78350, Dec. 24, 2002; 68 FR 12571, Mar. 17, 2003; 68 FR 65388, Nov. 20, 2003]

§ 50.76 Licensee’s change of status; financial qualifications.

An electric utility licensee holding an operating license (including a renewed license) for a nuclear power reactor, no later than seventy-five (75) days prior to ceasing to be an electric utility in any manner not involving a license transfer under §50.80, shall provide the NRC with the financial qualifications information that would be required for obtaining an initial operating license as specified in §50.33(f)(2). The financial qualifications information must address the first full five years of operation after the date the licensee ceases to be an electric utility.

[69 FR 4448, Jan. 30, 2004]

US/IAEA SAFEGUARDS AGREEMENT

§ 50.78 Installation information and verification.

Each holder of a construction permit shall, if requested by the Commission, submit installation information on Form N-71, permit verification thereof by the International Atomic Energy Agency, and take such other action as may be necessary to implement the US/IAEA Safeguards Agreement, in the manner set forth in §§75.6 and 75.11 through 75.14 of this chapter.

[49 FR 19627, May 9, 1984]